



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW1215G BYPASS RATIO: 8.6  
 UNIQUE ID NUMBER: 01P22PW168 PRESSURE RATIO ( $\pi_{00}$ ): 29.4  
 COMBUSTOR: TALON X, Block-C  
 ENGINE TYPE: TF RATED THRUST ( $F_{00}$ ) (kN): 67.7

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	0.1	32.1	38.4	3.9
AS % OF ORIGINAL LIMIT	0.5	27.0	39.0	15.0
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			49.0	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			55.0	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			59.0	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			66.0	

For non-volatile particulate matter (nvPM) emissions, please refer to the ICAO Engine nvPM Emissions Data Sheet.

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES  
 x DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 - OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	0.551	0.03	0.40	20.00	3.0
CLIMB OUT	85	2.2	0.461	0.02	0.40	15.80	1.8
APPROACH	30	4.0	0.166	0.02	3.00	8.30	0.4
IDLE	7	26.0	0.065	0.02	16.00	4.80	0.4
LTO TOTAL FUEL (kg) or EMISSIONS (g)			225	4	1768	2244	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				0.1	26.1	33.2	3.0
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.06-0.07	24.4-27.5	32.8-33.7	3-3.1

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.2-102.2
TEMPERATURE (K)	276.5-293.2
ABS HUMIDITY (kg/kg)	0.00108-0.00576

### FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	18-18.7

MANUFACTURER: Pratt & Whitney  
 TEST ORGANIZATION: Pratt & Whitney  
 TEST LOCATION: East Hartford, CT  
 TEST DATES: 28/03/2019-01/04/2019

### NO<sub>x</sub> REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

### REMARKS

- Data from certification report PWA-12113
- Block C Combustor
- Certification in accordance with ICAO Annex 16 Vol. II. 4th Edition, Part III, Chapter 2.

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)